

## REMARKS

Applicants submit the present Amendment to respond to the Office Action mailed November 14, 2006.

### I. The Claim Amendments

Applicants have cancelled Claims 1-2, 11, 15, 34, 36 and 45. Applicants have rewritten Claims 4, 5, 16 and 37 into independent form. Applicants have substantively amended Claims 3, 5-6, 17 and 21. Finally, Applicants have amended the dependencies of various claims in light of the cancellation of the above-referenced claims.

### II. The Rejections of Claims 1-14

Claims 1-2, 4-12 and 14 stand rejected as anticipated under 35 U.S.C. § 102(e) by U.S. Patent Application Publication No. 2003/0008680 to Huh et al. ("Huh"). (Office Action at 2). Claims 3 and 13 stand rejected as obvious over Huh in view of U.S. Patent Application Publication No. 2004/0097195 to Selleck ("Selleck"). As noted above, Applicants have cancelled Claims 1-2 and 11, rewritten Claim 4 into independent form, substantively amended dependent Claims 3, 5 and 6, and amended the dependencies of various of Claims 3 and 5-14. Applicants respectfully traverse the rejections of Claims 3-10 and 12-14 for the reasons discussed below.

#### A. The Rejection of Claim 4

Claim 4 recites:

4. A messaging interface for an interactive pager, comprising:
    - a housing;
    - a message processing circuit located within the housing;
    - a user interface located at least partly within the housing that is configured to convey a message that is associated with a text message between a user of the interactive pager and the message processing circuit; and
    - a communications circuit that is coupled to the message processing circuit and that is configured to convey the text message between the message processing circuit and the interactive pager;
- wherein the user interface comprises a microphone, the message comprises an audio message received via the microphone, and the message processing circuit

includes a voice recognition circuit that is configured to convert the audio message into the text message.

The Office Action cites to paragraphs 0079 and 0110 of Huh as disclosing the last clause of Claim 4 (i.e., "a voice recognition circuit that is configured to convert the audio message into the text message"). (Office Action at 3). The "audio message" recited in Claim 4 is "a message that is associated with a text message" that is conveyed "between a user of the interactive pager and the message processing circuit." The Office Action appears to take the position that the "read e-mail" command discussed in paragraph 0110 of Huh corresponds to the "audio message" of Claim 4, and that the e-mail that is read or displayed to the user comprises the "text message" of Claim 4. (See Office Action at 2-3). However, what Claim 4 recites is that the voice recognition circuit is configured to **convert "the audio message into the text message."**<sup>1</sup> Thus, unlike the system in Huh in which a **first command** is entered that results in a **different e-mail message** being displayed to the user, Claim 4 recites that the message that is entered through the microphone is then **converted into** the text message. It is beyond dispute that the command of Huh is not converted into a text message – instead, the command causes a **different** message (i.e., a received e-mail) to be displayed. Applicants also respectfully submit that nothing else in Huh discloses or suggests entering a message into a microphone of a messaging interface that is then converted by a voice recognition circuit into a text message that is conveyed between a message processing circuit of the messaging interface and an interactive pager as recited in Claim 4. Accordingly, Huh does not anticipate Claim 4, and hence the rejection of Claim 4 should be withdrawn for at least this reason.

#### B. The Rejection of Claim 5

Claim 5 has been converted into an independent claim. As amended, Claim 5 recites:

5. A messaging interface for an interactive pager, comprising:

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<sup>1</sup> While unclear, the Office Action may alternatively be taking the position that the text-to-speech capability recited in paragraph 0110 of Huh discloses the "voice recognition circuit that is configured to convert the audio message into the text message" of Claim 4. However, text-to-speech circuits convert text into speech as opposed to converting speech into text. Thus, this text-to-speech capability likewise fails to disclose or suggest the last recitation of Claim 4.

- a housing;
- a message processing circuit located within the housing;
- a user interface located at least partly within the housing that is configured to convey a message that is associated with a text message between the interactive pager and the message processing circuit; and
- a communications circuit that is coupled to the message processing circuit and that is configured to convey the text message between the message processing circuit and the interactive pager;

wherein the user interface comprises a microphone, the message comprises an audio message received via the microphone, and the message processing circuit includes a voice recognition circuit;

wherein the text message comprises a text message that is conveyed from the message processing circuit to the interactive pager for transmission by the interactive pager,

wherein the messaging interface further comprises a memory storage device located within the housing that stores a plurality of pre-defined text messages, and

wherein the audio message comprises a command that selects one of the plurality of pre-defined text messages as the text message that is conveyed from the message processing circuit to the interactive pager for transmission by the interactive pager.

The Office Action cites to paragraph 0079, lines 13-14 of Huh as disclosing the recitations of the last two clauses of Claim 5. (Office Action at 3). Applicants respectfully traverse the rejection of Claim 5.

In particular, the cited portion of Huh discusses a feature where a user may use a voice recognition system to pre-record audible voice prompts which are then stored as text in memory. A text-to-speech feature may then be used to reconvert this text back into an audible voice prompt to guide a user operating the system. However, as amended, Claim 5 recites that "the text message comprises a text message that is conveyed from the message processing circuit to the interactive pager **for transmission by the interactive pager.**" Even assuming, for the sake of argument, that the text-versions of the pre-recorded audible voice prompts of Huh that are stored in memory may properly be characterized as "a plurality of pre-defined text messages", it is indisputable that the text-versions of the pre-recorded audible voice prompts of Huh are not conveyed to the interactive pager "for transmission by the

interactive pager" as recited in Claim 5. Instead, the pre-recorded text discussed in Huh is used to create audible voice prompts that are provided to the user. Moreover, Claim 5 further recites that the "audio message comprises a command that selects one of the plurality of pre-defined text messages as the text message." While paragraph 0079 of Huh states that a user may give a command that is then acknowledged by the system of Huh using one of the pre-recorded audible voice prompts that are stored as text, Huh clearly does not disclose or suggest using an audio message as a command to select one of a plurality of pre-defined text messages as a text message that is conveyed to an interactive pager for transmission by the interactive pager as recited in Claim 5. Accordingly, the rejection of Claim 5 should be withdrawn for at least each of the above reasons.

### C. The Rejection of Claim 3

As noted above, Claim 3 stands rejected as obvious over the combination of Huh and Selleck. Claim 3 depends from Claim 5, and hence is patentable for each of the reasons, discussed above, that Claim 5 is patentable over the cited art. In addition, Claim 3 recites that "the user interface further comprises a keypad" and that "at least some of the keys on the keypad may be used to select respective ones of the plurality of pre-defined text messages." The Office Action cites to paragraph 0107 of Selleck as disclosing a keypad that includes keys that "are associated with a plurality of pre-defined text messages" as recited in Claim 3. (Office Action at 10). The Office Action further states that it would have been obvious to modify the system of Huh to include such "one-click" messaging buttons. (Office Action at 10).

Applicants respectfully submit, however, that neither Huh nor Selleck disclose or suggest providing keys that are associated with a plurality of pre-defined text messages that may be transmitted by an interactive pager as recited in Claim 3. Instead, the keys discussed in paragraph 0107 of Selleck are used to generate messages that are displayed on separate display screens that are mounted to be visible out of one or more windows of an automobile. (*See, e.g.*, Selleck at ¶ 0073). In fact, Selleck expressly teaches that one of the advantages of the system described therein is that it does not require that the participants in the "conversation" be part of a network. (*See* Selleck at ¶¶ 0008-0009). Accordingly, Applicants

respectfully submit that Claim 3 is independently patentable because a person of ordinary skill in the art would not have combined Huh and Selleck in the manner suggested in the Office Action.

**D. The Rejection of Claims 6-10 and 12-14**

Claims 6 and 7 depend from Claim 3. Claims 8-10 and 12-13 depend from Claim 5. Claim 14 depends from Claim 4. Applicants respectfully submit that each of these claims are patentable over the cited art for at least the reasons that the claims from which they depend are patentable over the cited art. In addition, Claim 12 recites that "at least some of the plurality of pre-defined text messages comprise pre-defined messages that are specified by the user of the interactive pager." While the Office Action cites to paragraphs 0079, 0082 and 0096 of Huh as disclosing the recitations of Claim 12, Applicants respectfully submit that none of the cited portions of Huh disclose allowing the user to specify a pre-defined text message that is transmitted by an interactive pager as recited in Claim 12. Accordingly, the rejection of Claim 12 should be withdrawn for at least this additional reason.

**III. The Rejections of Claims 15-20**

Claims 15-16 and 18-20 stand rejected as anticipated under 35 U.S.C. § 102(e) by Huh. (Office Action at 4-5). Claim 17 stands rejected as obvious over Huh in view of Selleck. As noted above, Applicants have cancelled Claim 15, rewritten Claim 16 into independent form, and amended Claims 18-20 to depend from Claim 16. Applicants respectfully traverse the rejections of Claims 16-20 for the reasons discussed below.

**A. The Rejection of Claim 16**

Claim 16 recites:

16. messaging interface for an interactive pager, comprising:
  - a housing;
  - a microphone located within the housing;
  - a voice recognition circuit located within the housing that is configured to convert an audio signal received by the microphone into a text message;
  - a communications circuit in the housing that is configured to forward the text message from the voice recognition circuit to the interactive pager; and

a memory storage device located within the housing that stores a plurality of pre-defined text messages, wherein at least some of the plurality of pre-defined messages are forwarded to the interactive pager in response to a voice command.

Applicants respectfully submit that the cited portions of Huh do not disclose the last three recitations of Claim 16.

In particular, the Office Action states that paragraph of 0080, lines 1-4, paragraph 0037, lines 1-4 and paragraph 0110 of Huh disclose "a voice recognition circuit . . . that is configured to convert an audio signal . . . into a text message" and a "communications circuit . . . that is configured to forward the text message from the voice recognition circuit to the interactive pager." While Applicants agree that paragraph 0080 of Huh discusses speech recognition functions, nothing in Huh suggests that the system of Huh is configured to (1) "convert an audio signal received by the microphone into a text message" and then (2) forward this text message from the voice recognition circuit to the interactive pager" as recited in Claim 16. Indeed, the cited portions of Huh at most disclose (1) a speech recognition capability in the docking station that may receive and recognize voice commands (paragraph 0080), (2) a keypad on a cellular telephone that may be used to dial numbers or access other features of the cellular telephone (paragraph 0037) and (3) a capability to display received e-mail messages on an external display and/or to read such received e-mail messages using text to speech functionality (paragraph 0110). None of these sections even remotely suggest "convert[ing] an audio signal . . . into a text message" and then "forward[ing] the text message . . . to the interactive pager" as recited in Claim 16. Accordingly, the rejection of Claim 16 should be withdrawn for at least this reason.

Additionally, Applicants respectfully submit that Huh does not disclose or suggest "a memory storage device located within the housing that stores a plurality of pre-defined text messages, wherein at least some of the plurality of pre-defined messages are forwarded to the interactive pager in response to a voice command" as recited in the last clause of Claim 16. The Office Action cites to paragraphs 0079 (lines 14-17) and 0110 of Huh as disclosing this capability. (Office Action at 5). While paragraph 0079 of Huh states that a user may pre-record audible prompts that are then stored as text in the system of Huh, nothing in either paragraph 0079 or 0110 of Huh suggests forwarding at least some of the pre-defined text

messages to the interactive pager in response to a voice command as recited in Claim 16. Accordingly, the rejection of Claim 16 should also be withdrawn for this additional reason.

**B. The Rejection of Claims 17-20**

Claims 17-20, as amended, depend from Claim 16. Accordingly, Applicants submit that each of these claims are patentable over the cited art for at least the reasons that the claims from which they depend are patentable over the cited art. In addition, Claim 17 includes recitations similar to original Claim 3 and stands rejected based on the same rationale used to reject Claim 3. Accordingly, Applicants further submit that Claim 17 is independently patentable for at least the same reasons, discussed above, that Claim 3 is independently patentable over the cited art.

**IV. The Rejections of Claims 21-33**

Claims 21-24, 27 and 29-33 stand rejected as obvious over Huh in view of Selleck. (Office Action at 9-13). Claims 25-26 and 28 stand rejected as obvious over Huh in view of Selleck and one of two secondary references. Applicants respectfully traverse the rejections of Claims 21-33 for the reasons discussed below.

**A. The Rejection of Claim 21**

Claim 21 recites:

21. A messaging interface for an interactive pager, comprising:
  - a housing;
  - a memory storage device within the housing, the memory storage device containing a plurality of pre-defined text messages;
  - a plurality of user selectable indicia provided on the housing, a respective one of which is associated with a respective one of the plurality of pre-defined text messages; and
  - a communications circuit configured to forward one of the plurality of pre-defined text messages from the messaging interface to the interactive pager for transmission by the interactive pager in response to the selection of one of the plurality of user selectable indicia;
- wherein at least some of the plurality of pre-defined text messages comprise pre-defined messages that are specified by the user of the interactive pager.

As an initial matter, Applicants respectfully submit that neither Huh nor Selleck disclose or suggest providing a circuit that is "configured to forward one of the plurality of pre-defined text messages from the messaging interface to the interactive pager **for transmission by the interactive pager** in response to the selection of one of the plurality of user selectable indicia" as recited in the next to last clause of Claim 21. Instead, the "one-click" messaging buttons of Selleck are used to send a message to a display within an automobile that is preconfigured to work in conjunction with the command terminal that includes the "one click" buttons. As discussed above, Huh likewise does not disclose or suggest forwarding a text message to an interactive pager for transmission. Accordingly, the rejection of Claim 21 should be withdrawn for at least this reason.

In addition, Claim 21 has been amended to recite that "at least some of the plurality of pre-defined text messages comprise pre-defined messages that are specified by the user of the interactive pager." As discussed above with respect to the rejection of Claim 12, the portions of Huh that are cited in the Office Action as teaching this recitation simply do not disclose or suggest allowing a user to specify a pre-defined text message that is forwarded over a network. Instead, what the cited portions of Huh discuss is storing user-recorded audible voice prompts that may later be used to guide a user in operating the system of Huh. (See Huh at ¶ 0079). Accordingly, the rejection of Claim 21 should be withdrawn for this additional reason.

#### B. The Rejection of Claims 22-33

Claims 22-33 each depend directly or indirectly from Claim 21. Accordingly, Applicants submit that each of these claims are patentable over the cited art for at least the reasons that the claims from which they depend are patentable over the cited art. In addition, Applicants submit that at least Claims 24, 29, 30, 31 and 32 are independently patentable over the cited art.

For example, Claim 24 recites that "the top surface of at least some of the plurality of buttons are configured differently than the top surface of other of the plurality of buttons." While the Office Action cites to paragraph 106 of Selleck as disclosing such buttons, Applicants respectfully submit that paragraph 0106 of Selleck discloses no such thing.



Moreover, FIG. 1 of Selleck suggests that each of the plurality of buttons are identical. Accordingly, Applicants submit that Claim 24 is patentable over the cited art for at least these additional reasons. Claim 29 includes recitations similar to Claim 4, and thus Claim 29, as well as Claim 30 which depends therefrom, is patentable over the cited references for reasons similar to the reasons, discussed above, that Claim 4 is patentable over the cited art (i.e., the cited references do not disclose "convert[ing] an audio signal input via the microphone into a text message, and [then] . . . forward[ing] the text message provided by the voice recognition circuit to the interactive pager" as recited in Claims 29-30). Claim 31 recites "a speaker and a voice synthesis circuit that is configured to convert a text message received by the interactive pager into an electronic signal that is played through the speaker." The Office Action states that paragraphs 0073 and 0074 disclose the recitation of Claim 31. However, the cited portion of Huh refers to a speakerphone capability in which CODECs are used to digitize an analog signal so that digital signal processing may be performed thereon. (*See, e.g.*, Huh at ¶ 0072). As such, the cited portion of Huh does not disclose "a voice synthesis circuit that is configured to convert a text message received by the interactive pager into an electronic signal that is played through the speaker" as recited in Claim 31, but instead discloses a circuit that digitizes an analog signal before it is played through a speaker. Accordingly, the rejection of Claim 31 should likewise be withdrawn. Claim 32 depends from Claim 31 and hence is patentable for the same additional reasons that Claim 31 is patentable over the cited art. In addition, while the Office Action cites to paragraph 0107 of Selleck as disclosing the recitations of Claim 32, Applicants respectfully submit that the cited portion of Selleck discusses buttons that send a pre-programmed message as opposed to buttons that "may be used to cause the voice synthesis circuit to output through the speaker a synthesized voice signal that reads identifying information associated with a received text message" as recited in Claim 32. Accordingly, Claim 32 is patentable over the cited art for this additional reason.

## V. The Rejections of Claims 34-39

Claims 34-38 stand rejected as anticipated under 35 U.S.C. § 102(e) by Huh. (Office Action at 4-5). Claim 39 stands rejected as obvious over Huh in view of Selleck. As noted

above, Applicants have cancelled Claims 34 and 36, rewritten Claim 37 into independent form, and amended Claims 35 and 38-39 to depend from Claim 37. Applicants respectfully traverse the rejections of Claims 35 and 37-39 for the reasons discussed below.

A. The Rejection of Claim 37

Claim 37 recites:

37. A messaging interface for an interactive pager, comprising:

a housing;

a voice synthesis circuit located within the housing that is configured to convert a text message into an audio signal;

a speaker responsive to the voice synthesis circuit;

a communications circuit, located at least partly within the housing, that is coupled to the voice synthesis circuit and that is configured to forward the text message from the interactive pager to the voice synthesis; and

a microphone and a voice recognition circuit that is configured to convert an audio signal input via the microphone into a second text message,

wherein the communications circuit is further configured to forward the second text message provided by the voice recognition circuit to the interactive pager,

wherein the messaging interface further includes a memory storage device located within the housing that stores a plurality of pre-defined text messages, and wherein the voice recognition circuit is configured to forward one of the plurality of pre-defined messages to the interactive pager in response to the audio signal input via the microphone.

Applicants respectfully submit that the cited portions of Huh do not anticipate Claim 37.

In particular, the Office Action states that paragraph of 0082, lines 12-19 of Huh disclose "a voice recognition circuit that is configured to convert an audio signal . . . into a second text message" and that paragraph 0110 discloses a "communications circuit that is configured to forward the second text message provided by the voice recognition circuit to the interactive pager." (Office Action at 6). However, even assuming, for the sake of argument, that the "stored word models" discussed in paragraph 0082 of Huh could be considered to comprise a "second text message", it is beyond dispute that neither paragraph 0082 paragraph 0110 or any other portion of Huh teaches forwarding such stored word models to an

interactive pager. Instead, these "stored word models" are used to determine which spoken command a user has entered. As such, Claim 37 is patentable over Huh for at least this reason.

In addition, Claim 37 further recites "a memory storage device located within the housing that stores a plurality of pre-defined text messages, and wherein the voice recognition circuit is configured to forward one of the plurality of pre-defined messages to the interactive pager in response to the audio signal input via the microphone." The Office Action states that paragraphs 0079 (lines 14-19) and 0110 of Huh disclose this recitation of Claim 37. (Office Action at 6). While paragraph 0079 of Huh states that a user may pre-record audible prompts that are then stored as text in the system of Huh, nothing in either paragraph 0079 or 0110 of Huh suggests **forwarding** at least some of the pre-defined text messages to the interactive pager in response to a voice command as recited in Claim 37. Accordingly, the rejection of Claim 37 should also be withdrawn for this additional reason.

#### B. The Rejection of Claims 35 and 38-39

Claims 35 and 38-39, as amended, depend from Claim 37. Accordingly, Applicants submit that each of these claims are patentable over the cited art for at least the reasons that Claim 37 is patentable over the cited art. In addition, Claim 38 recites that "the voice synthesis circuit is configured to play back a message input via the microphone before the message input via the microphone is forwarded as a text message to the interactive pager." The Office Action cites to paragraph 0083 of Huh as disclosing this recitation. However, the cited portion of Huh merely discloses a voice recorder and playback capability but does not disclose or suggest playing back a text message **before it is forwarded to an interactive pager** as is recited in Claim 38. Accordingly, Applicants further submit that Claim 38 is independently patentable over the cited art for at least this additional reason. Applicants likewise submit that Claim 39 is independently patentable over the cited art for the same reasons, discussed above, that Claim 3 is independently patentable over the cited art.

## VI. The Rejections of Claims 40-44

Claims 40-44 stand rejected as anticipated under 35 U.S.C. § 102(e) by Huh. (Office Action at 4-5). Applicants respectfully traverse these rejections.

### A. The Rejection of Claim 40

Claim 40 recites:

40. A method of responding to a text message, the method comprising:
- receiving the text message on an interactive pager;
  - accepting a command at an external messaging interface for the interactive pager;
  - selecting from a plurality of pre-defined text messages stored in a memory storage device resident on the external messaging interface a pre-defined text message that corresponds to the entered command;
  - forwarding the selected pre-defined text message from the memory storage device to the interactive pager; and
  - transmitting from the interactive pager the selected pre-defined text message as a response to the text message.

The Office Action states that paragraph 0080 of Huh discloses "accepting a command at an external messaging interface" and that paragraph 0082 of Huh discloses "selecting from a plurality of pre-defined text messages stored in a memory storage device resident on the external messaging interface a pre-defined text message that corresponds to the entered command" as recited in Claim 40. Applicants do not dispute that paragraphs 0080 and 0082 of Huh state that the docking station may receive voice commands and may compare such commands to "stored word models." However, Claim 40 further recites "forwarding the selected pre-defined text message . . . to the interactive pager." While the Office Action cites to paragraph 0082, lines 11-19 of Huh as disclosing this recitation of Claim 40, what the cited portion of Huh states is that "a signal" – as opposed to the selected one of the "pre-defined text messages" as recited in Claim 40 – is sent in response to the voice command to the cellular telephone. Accordingly, Applicants respectfully submit that it is clear that the cited portions of Huh do not disclose the "forwarding" recitation of Claim 40.

In addition, Claim 40 further recites "transmitting from the interactive pager the

selected pre-defined text message as a response to the text message." The Office Action cites to paragraph 0110 of Huh as disclosing this recitation of Claim 40. However, the cited portion of Huh does not disclose that one of the "stored word models" of paragraph 0082 of Huh (i.e., the alleged "selected pre-defined text message") is forwarded in response to the text message as recited in Claim 40, nor does any other portion of Huh. Accordingly, the rejection of Claim 40 as anticipated by Huh should be withdrawn for this additional reason.

**B. The Rejection of Claims 41-44**

Claims 41-44 depend from Claim 40. Accordingly, Applicants submit that each of these claims are patentable over the cited art for at least the reasons that Claim 40 is patentable over the cited art. In addition, Claim 43 recites that "entering a command into an external messaging interface for the interactive pager comprises selecting a button provided on the external messaging interface." While the Office Action cites to paragraph 0080 of Huh as disclosing this recitation, this portion of Huh merely states that the pocket may include buttons that a user may use to enter a voice command mode or a memo record mode. (See Huh at ¶ 0080, lines 25-28). It certainly does not disclose or suggest using a button to select a command, where a pre-defined text message is later selected that corresponds to the entered command as recited in Claim 43. Accordingly, Claim 43 is independently patentable over Huh for this additional reason.

**VII. Conclusion**

Inasmuch as the points and concerns raised in the Office Action have been addressed in full, Applicants respectfully request that this application is in condition to pass to issue, which action is respectfully requested. Should the Examiner have any matters of outstanding resolution, he is encouraged to telephone the undersigned at 919-854-1400 for expeditious handling.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. Randal Ayers", with a long horizontal flourish extending to the right.

D. Randal Ayers  
Registration No. 40,493

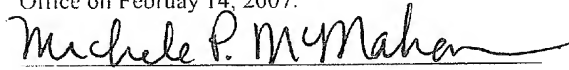
In re: John Blake Slemmer et al.  
Application No.:10/767,186  
Filed: January 29, 2004  
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**Customer No. 46590**

Myers Bigel Sibley & Sajovec  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401

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